

**Environmental Management Site Specific Advisory Board Chairs Meeting
Meeting Summary
March 28-30, 2007
Las Vegas, Nevada**

The Environmental Management (EM) Site Specific Advisory Board (SSAB) met March 28-30, 2007, at the Suncoast Hotel and Casino in Las Vegas, Nevada. The Community Advisory Board (CAB) for Nevada Test Site (NTS) Programs hosted the meeting. Participants included Chairs, Vice Chairs, Co-Chairs, other EM SSAB members, Department of Energy (DOE) Headquarters and field staff, site coordinators, EM SSAB administrators, and support staff. The meeting was facilitated by Ms. Carla Sanda, facilitator for the NTS CAB. Many of the meeting attendees participated in a tour of the Nevada Test Site on March 28, 2007.

Participants:

- Hanford Advisory Board: Shelley Cimon, Member; Susan Leckband, Chair; Karen Lutz, Federal Coordinator; Erik Olds, Federal Coordinator; Penny Mabie, Facilitator
- Idaho National Laboratory Site Citizens Advisory Board: Lisa Aldrich, Support Staff; John Bolliger, Vice Chair; Richard Buxton, Co-Chair; William Flanery, Co-Chair; Tracy Leatham, Support Staff; Robert Pence, Federal Coordinator; Willie Preacher, Member; Doug Weir, Member
- Nevada Test Site Community Advisory Board: Bill Aldrich, Member; Bob Gatliff, Member; David Hermann, Chair; Robert Johnson, Member; Vernell McNeal, Member; Helen Neill, Technical Advisor; Ted Oom, Member; Kay Planamento, Support Staff; Carl Robinson, Support Staff; Carla Sanda, Facilitator; Kelly Snyder, Deputy Designated Federal Officer (DDFO); Stacy Standly, Member; Englebrecht von Tiesenhausen, Member; James Weeks, Member; Walt Wegst, Vice Chair
- Northern New Mexico Citizens' Advisory Board: Frances Berting, Vice Chair; J.D. Campbell, Chair; Christine Houston, DDFO; Menice Santistevan, Support Staff
- Oak Ridge Site Specific Advisory Board: Dave Adler, Federal Coordinator; Steve Dixon, Member; Spencer Gross, Support Staff; Norman Mulvenon, Vice Chair; Steve Stow, Member
- Paducah Gaseous Diffusion Plant Citizens Advisory Board: Allen Burnett, Chair; Kim Crenshaw, Support Staff; Reinhard Knerr, DDFO; Janet Miller, Deputy Chair; Eric Roberts, Support Staff; John Russell, Member; Jimmy Smart, Member
- Savannah River Site Citizens Advisory Board: Donna Antonucci, Vice Chair; Gerri Flemming, Federal Coordinator; Karen Patterson, Chair
- DOE Headquarters:
 - James A. Rispoli, Assistant Secretary for Environmental Management
 - Tony Carter, DOE Legacy Management
 - Douglas Frost, Designated Federal Officer, Office of Public and Intergovernmental Accountability
 - Mark Gilbertson, Deputy Assistant Secretary for Engineering and Technology
 - Melissa Nielson, Director, Office of Public and Intergovernmental Accountability
- DOE Field:

Stephen Mellington, Assistant Manager for EM, Nevada Site Office
David Moody, Manager, Carlsbad Field Office
Jerry Talbot, Manager, National Nuclear Security Administration Nevada Site Office

- Nevada Division of Environmental Protection: Christine Andres, Don Elle, Tim Murphy
- Other: Fred Butterfield, Environmental Protection Agency; Dennis Ferrigno, Environmental Management Advisory Board

Thursday, March 29, 2007

Opening Remarks:

Mr. David Hermann, NTS CAB Chair, welcomed all of the meeting participants.

Ms. Sanda introduced Mr. Jerry Talbot, Manager for DOE's National Nuclear Security Administration (NNSA) Nevada Site Office.

Mr. Talbot commented that the federal government had important choices to make regarding environmental management, which need to be accountable and transparent to stakeholders. The EM SSAB is evidence of that transparency.

Round Robin: Top Three Issues from Each SSAB

Each EM SSAB was given an opportunity to highlight current issues facing its board and site. Below are the top issues from each site.

Hanford Advisory Board (HAB): Ms. Susan Leckband, Chair, presented the HAB's top issues.

Groundwater

- The HAB's primary concern is for the protection of the Columbia River, "the life blood of the Pacific Northwest."
- The HAB is currently developing a flow chart for citizen input on decisions affecting groundwater clean-up.
- Groundwater contamination extends across the site; integration and cooperation between contractors and Hanford's two DOE field offices is very important.

Pre-1970 Transuranic (TRU) Waste Path

- Hanford has not developed a plan to characterize or retrieve its pre-1970 suspect TRU waste.
- The HAB would like to see a path forward for this; there are opportunities to optimize characterization of this waste while cleaning up adjacent waste sites.

Waste Treatment Plant (WTP)

- The WTP start-up has been postponed from 2011 to 2019.
- The HAB is concerned because the tanks holding the waste that will be vitrified in the WTP are well beyond their design life.

Clean-up Continuity

- Hanford has recently lost both of its field office managers, and all of its major contracts are up for re-bid. The HAB would like to ensure that the site's clean-up momentum is maintained during this transition.

Idaho National Laboratory Site Citizens Advisory Board (INL CAB): Mr. Richard Buxton, Co-Chair, and Mr. William Flanery, Co-Chair, presented the INL CAB's top issues.

Groundwater Contamination

- The State of Idaho has a settlement agreement with DOE and the Navy regarding the Snake River Aquifer, which extends from Yellowstone National Park through southern Idaho and into the Columbia River.
- The aquifer feeds agricultural lands; its contamination is of great concern to local farmers.
- Although significant radioactivity has not been found downstream, the INL CAB plans to remain alert and monitor the situation.

Reprocessing

- The INL CAB is aware of the fact that if Yucca Mountain doesn't open soon, it will reach its capacity for waste very quickly.
- The INL CAB is concerned that INL may become the de facto repository until another location is identified to receive spent nuclear fuel.

Buried Waste

- DOE is in the process of completing a study on alternatives to address buried waste that range from taking no action to retrieving and transporting the waste off site.
- The selected alternative will likely involve a combination of capping and removal. It would be far worse to do nothing, rather than choose an alternative to complete removal. State representatives are beginning to appreciate the long-term impacts offered by the alternatives.

Nevada Test Site Community Advisory Board (NTS CAB): David Hermann presented the NTS CAB's top issues.

Groundwater Characterization Wells

- The NTS CAB recently made a recommendation that DOE conduct an independent peer review of its site's Underground Test Area (UGTA) Project.
- The NTS CAB's UGTA Committee has extensively studied the issue of the Nevada Test Site's contaminated water table and developed recommendations for three strategic monitoring wells.

- The UGTA Project needs funding in order to install the wells and ensure that contamination of the water table has not migrated off site.
- A report on the UGTA recommendations is under review and should be available to the EM SSAB prior to the next Chairs' meeting.

Maintainable Funding

- The NTS CAB is also dealing with the issue of internally generated waste versus waste that is shipped to its site from around the complex.
- It is important for the site to have adequate funding in order to ensure that scheduled waste disposition activities can be maintained while still complying with Nevada's regulatory requirements.

Northern New Mexico Citizens' Advisory Board (NNMCAB): Mr. J.D. Campbell, Chair, presented the NNM CAB's top issues.

EM Budget and New Baseline Convergence

- The NNMCAB has begun reviewing the EM budget target and has expressed concern because five-year projections still show the site missing milestones defined by its existing consent order.
- The NNMCAB is looking at ways to optimize available funding and reprioritize activities in order to avoid this.

Radioactive Waste in Area G

- Area G is an old landfill that includes both mixed waste and pre-1970 TRU waste. DOE expects to close this site with an engineered cover, but citizens would like to see its contents completely removed.
- The NNMCAB plans to explore this issue through a risk-informed public discussion in order to work with Los Alamos National Laboratory (LANL) and promote awareness.

Groundwater Monitoring and Protection at LANL

- Initial monitoring wells were created with drilling liquids, which impacted DOE's ability to collect representative samples from underground aquifers.
- LANL is trying to redevelop the wells, but there is still a great amount of uncertainty regarding the reliability of their samples.
- The new installations will attempt to minimize impact to the aquifer, which is also the sole source of Northern New Mexico's drinking water.

Oak Ridge Site Specific Advisory Board (ORSSAB): Mr. Norman Mulvenon, Vice Chair, presented the ORSSAB's top issues.

Stewardship

- The ORSSAB has continued its public education and outreach efforts.
- The ORSSAB made a recommendation to DOE that EM provide a liaison to fill the vacancy left by the transfer of Oak Ridge's Long-Term Stewardship Office to the DOE Legacy Management program. The ORSSAB is currently fulfilling this

role itself, but would like a DOE liaison that could provide briefings and access to EM stewardship issues.

Waste Management

- The ORSSAB believes that all new projects, EM or other, should include consideration at the front end for waste management issues in order to minimize the potential for future contamination.
- It is important to ensure that proper characterization occurs up front, and disposition paths and treatment plans are put in place.

Groundwater/Surface Water Monitoring

- Oak Ridge's Melton Valley site has been cleaned-up and capped as of September 2006. The contamination of nearby water sources has since decreased.
- Stewardship must be kept in mind when dealing with groundwater issues, especially when contamination is left in place. The final records of decisions must be precise, understandable, and contain proper direction for future generations.

Completeness of Reservation Remediation

- "Leave no building behind." Thousands of buildings on the Oak Ridge Reservation have been torn down and the ORSSAB would like to ensure that the work is completed.
- A number of facilities have been lumped under the site's Balance of Reservation Project and Integrated Facilities Disposition Plan, which must also be addressed in a timely manner.

Paducah Gaseous Diffusion Plant Citizens Advisory Board (PGDP CAB): Mr. Allen Burnett, Chair, presented the Paducah CAB's top issues.

DOE-CAB Relationship

- The PGDP CAB's relationship with DOE has improved. The PGDP CAB has a new chair, new Deputy Designated Federal Officer (DDFO), and new Federal Coordinator, as well as a more local presence with the Department.
- The result has been significant progress in communication and productivity. However, the PGDP CAB continues to experience difficulties with member recruitment and development.

Soil/Rubble Piles

- A number of contaminated soil and rubble piles were discovered within the site's security fence and in the Wildlife Management area.
- The PGDP CAB has provided comments and recommendations on DOE's Sampling/Analysis Plan and will continue to monitor the issue.

Design/Implementation of the C-400 Project

- Two major groundwater plumes originate from Paducah's C-400 project, which has an active decontamination facility.

- A design review is due shortly, and the PGDP CAB will provide comments to DOE.

Savannah River Site Citizens Advisory Board (SRS CAB): Ms. Karen Patterson, Chair, presented the SRS CAB's top issues.

High-Level Waste (HLW) System

- The Savannah River Site has experienced recent successes in gaining control of its groundwater plumes and closing two major facilities, as well as putting the final cap on a burial ground.
- The Savannah River Site is also planning the decontamination and decommissioning (D&D) of its first reactor.
- Like Hanford, Savannah River has waste stored in a number of tanks that are beyond their design life. The SRS CAB is concerned because the sites' HLW system project has significantly delayed the removal and treatment of this tank waste.

Plutonium Disposition Decisions

- DOE's consolidation and disposition plan for plutonium is to bring the plutonium to Savannah River from across the complex and either process it in the site's Mixed Oxide Fuel Fabrication (MOX) Facility, build a vitrification plant, or extend the life of H-Canyon and use it for disposal.

Storage, Treatment, and Disposal of Waste from Other/New Missions

- The SRS CAB is monitoring the storage, treatment, and disposal of waste from new/other missions and would like the opportunity to provide input on how that waste is disposed, regardless of which program or project generates it.

EM Presentation - James Rispoli, Assistant Secretary for Environmental Management (EM-1)

Mr. Rispoli thanked those responsible for the meeting's preparation, and extended his personal gratitude to those individuals who volunteer their time to serve on the EM SSAB and contribute to the EM program. He encouraged participants to use this important forum to discuss issues affecting sites across the EM complex; although the site's technical and physical realities differ, they share similar challenges. EM seeks to take advantage of the capabilities it has built across the complex to advance its common mission, rather than replicate facilities and workforces to cover the same ground.

Mr. Rispoli clarified that existing milestones throughout the complex have not and will not be missed due to a lack of funding; rather, missed milestones are the result of other complications. EM sites must work together to figure out how to resolve technical and performance issues that often lead to missed milestones. EM does not want notices of violation, but it would like to build on its relationships with stakeholders.

EM continues to focus on safe and cost-effective risk reduction and clean-up. The

program has taken this approach throughout the complex and has concentrated on true risks to workers, communities, and the environment, rather than those risks that do not present a clear and present danger. Its priorities include safety; disposition capabilities for high-risk nuclear materials; disposition capability for contact and remote handled TRU waste and low-level waste (LLW); soil and groundwater remediation; D&D; and support for post-closure liabilities.

EM is also striving to become an organization with industry partners that recognizes professional competence and yields high performance. The program's project management and acquisition strategies are being used to make EM money go further and work harder. In support of this, EM-1 and Headquarters (HQ) staff engage in Quarterly Project Reviews with Federal Project Directors. Ultimately, EM's objective is to have all of its projects' costs and schedules independently audited.

EM must improve its incorporation of safety into the design and construction of its projects. Federal Project Directors are responsible and accountable for the integration of safety and quality assurance into EM projects. In fact, they must implement EM's occupational safety rules to ensure that adequate safety accommodations are provided to all workers. EM-1 also receives normalized safety data in order to better analyze and make management decisions that focus on improvement.

Mr. Rispoli discussed a number of management initiatives, including the implementation of the program's Human Capital Plan, and the launch of the EM Career Intern Program. Furthermore, EM expects to bring a new Office Director on board to improve its acquisition process and run the program's pre-award organization. EM also is working to improve its communications. Mr. Rispoli noted that site managers must be responsive to stakeholders in their community; there must be an opportunity for open dialogue to convey why certain decisions are made.

Specific to the Chairs, Mr. Rispoli indicated that he would like the EM SSAB to continue focusing and providing input on EM Budget development and the Five-Year Plan. He also suggested that meeting participants read the Energy Communities' Alliance publication, "The Politics of Cleanup." Lastly, he encouraged everybody to visit EM's newly redesigned website and thanked meeting participants for their time.

"FACA 101" - Fred Butterfield, Environmental Protection Agency

Mr. Butterfield explained that the Federal Advisory Committee Act (FACA) provides standards that govern the establishment, operation, administration and termination of federal advisory committees. FACA was enacted in 1972 and superseded by the General Services Administration's (GSA) Final Rule in 2001. The Act also enhances the public accountability of advisory committees; controls the undue influence of special interests; ensures that public access to committee deliberations is maximized; reduces wasteful expenditures; and eliminates unproductive or unnecessary committees.

FACA committees are formed either by statute, Presidential authority, or agency

authority. They are known by many names, but if they are established and utilized by a federal entity for the purpose of obtaining advice and recommendations, then they are subject to FACA. However, Mr. Butterfield stipulated, FACA does not apply to subcommittees - so long as they are not used to circumvent the GSA Final Rule - nor does it apply to the National Academy of Sciences (NAS), the National Academy of Public Administration, or government corporations.

FACA committees exist to advise and recommend; they do not exist to make decisions or serve as oversight or operational committees. Agencies are not bound by the committees' advice, but it is presumed that because the agency desires that advice it will take it to heart. Furthermore, FACA was not intended to be a public participation statute per se; however, it directly affects how the Executive Branch is held accountable for using advisory committees as a source of public involvement. The hierarchy of FACA committees' accountability is as follows: FACA, GSA Regulation/Final Rule, agency-specific directives, committee-specific guidance documents, and lastly, individual committee manuals or bylaws. FACA committees must also be adequately funded and have access to office space, supplies, support staff, and key decision makers.

Records need to be maintained for the duration of the committee. They may include any document that is substantive to the committee's activities. FACA is a contemporaneous statute, and records must be available to the public.

The EM SSAB is a unique structure established by agency authority. Its Committee Management Officer is James Solit, who is supported by Rachel Samuel. The individual EM SSAB Boards are not considered subcommittees; every CAB's full meeting is considered a FACA meeting and must meet the criteria defined by the Act and GSA Final Rule.

FACA committees must be chartered before they can meet or conduct business. The Charter is a high-level document and should contain the following: committee title, official designation, objectives/scope, duration, federal officer/agency to which the committee reports, description of duties, annual costs, frequency of meetings, planned termination date, etc. The charter is a committee's birth certificate; it adds legitimacy and must be renewed every two years.

The EM SSAB charter is aligned with EM. Although CABs would like to comment on other projects/programs/etc. at their sites, those items are not covered in the EM SSAB charter. Doing so may be an inappropriate use of EM funds.

FACA committees must be fairly balanced in terms of membership, specifically with respect to the points of view being represented and the functions being performed. Members are federal appointees and serve at the pleasure of the appointing authority; they may be classified as Representatives, Special Government Employees, Regular Government Employees, or Ex Officios.

FACA committee meetings should be open to the public with limited exceptions.

Advanced notice must be published in the *Federal Register* at least 15 days prior to a meeting. The Designated Federal Officer (DFO) or DDFO is required to approve the agenda and attend. Detailed minutes must be kept and should include a list of participants and a complete and accurate description of the events. Minutes must also be certified and made available to the public. Furthermore, FACA committee meetings should be held at a reasonably accessible time and location. Any member of the public is permitted to file a written statement with the committee at any time, and they may speak or address the committee if the agency's guidelines so permit. Public participation should compliment and not control committee meetings; committee members have no responsibility to respond to public commentary.

FACA committee members should exercise independent judgment and provide independent advice. No one individual should be allowed to exercise so much influence that others on the committee feel uncomfortable or unwilling to share their views. FACA does not require consensus; rather, the standard is group advice. The stronger a committee speaks as a unified entity, the louder it will be heard by an agency.

Lastly, agencies should practice openness and seek to be inclusive; they should seek feedback from all advisory committee members and be responsive. Agencies should also express a high level of courtesy and professionalism, especially with regard to committee reports and recommendations.

**Reducing Risks and Uncertainties to Environmental Management Projects
Presentation and Discussion – Mark Gilbertson, Deputy Assistant Secretary (DAS),
Office of Engineering and Technology (EM-20)**

In his introduction, Mr. Gilbertson stated that EM-20 is focused on reducing technical risks to the overall EM program and comprises the Offices of Waste Processing, Groundwater and Soil Remediation, and D&D and Facility Engineering.

EM-20 combines technology and engineering advances and translates the program's needs into something that scientists can address in order to contribute to the greater mission's success. The magnitude of EM is still very large and although its mission in the past was to accelerate clean-up, the current philosophy of project management provides a more systematic approach to paths forward.

Improved project management allows EM to strategically apply science and technology and leverage its investments. Mr. Gilbertson stated that in addition to current baselines, there are a number of facilities and projects that may cross into EM scope. Furthermore, increased scrutiny on behalf of the Defense Nuclear Facilities Safety Board will impact life-cycle costs.

In an effort to make risk reduction more transparent, External Technical Reviews (ETR) will be conducted at each site. ETRs have become part of EM's project management structure. Mr. Gilbertson provided a few examples of current and future ETRs concerning waste processing and groundwater remediation.

Furthermore, EM-20 is pursuing high-impact, new generation technologies and soliciting demonstration proposals. As an example, Mr. Gilbertson provided a description of Nondestructive Examination/Assay Technology and detailed a few tank removal technologies that could revolutionize EM's approach to tank clean-up and removal. Other technologies under review include: the Cold Crucible Induction Melter, Steam Reforming, High-Resolution Resistivity Subsurface Characterization, and Tank Waste Aluminum Recovery.

Mr. Gilbertson commented that these efforts also require more communication. As an aside, he noted that Mr. Rispoli had established four working groups to improve the EM organization. One of those groups is the EM Communications Working Group, which is led by Mr. Gilbertson and Mr. Bill Spader.

With regard to the waste forms destined for storage at Yucca Mountain, Mr. Gilbertson stated that EM has not developed a contingency plan for full-scale on-site storage in the event that the facility is delayed or does not open.

EM-20 is working to recreate technical communities of practice. Knowledge exchanges and networks of the best people in the country are integral to obtaining information and making informed decisions.

Mr. Gilbertson's office has also initiated a number of workshops, several of which included web-casts to make them more widely available. The goal of the workshops is to encourage constructive dialogue and produce innovative results. They have included a Columbia River Workshop, an Aluminum/Chromium Leaching Workshop, and a Cementitious Waste workshop. Products and materials from the workshops are available through their websites; Mr. Gilbertson also agreed to provide the EM SSAB with the summary from the Office of Science's workshop on groundwater modeling.

Mr. Burnett asked Mr. Gilbertson to clarify the nature and use of grout in remediation activities.

Mr. Gilbertson explained that grout refers to a wide variety of materials and formulations. Currently, EM assumes that grout will eventually disappear and release its contents into the environment. Scientific validity and an understanding of how grout formulations break down and how long they maintain their integrity are two examples of the technical uncertainty facing the program.

Ms. Leckband expressed concern that the recreation of communities of practice may lack a certain breadth and depth. There is a lot of benefit that can be reaped through communication across EM, but there are also many complex site-specific issues that are not captured in this concept.

Mr. Gilbertson agreed with Ms. Leckband. Her observation is an example of a lesson learned; one size does not fit all. However, EM must start somewhere before it can

become more sophisticated in this effort.

Mr. Gilbertson added that EM has asked NAS to provide the program with advice. NAS will review the effects of EM's three, five, and ten-year cyclical contractor changes to determine what kind of people, programs, and infrastructure EM needs to withstand these transitions. The co-location of DOE's national laboratories with EM sites may provide the expertise, investment, and resident capabilities necessary to ensure the program's long-term success. EM needs to identify the items it must protect going into the future, especially in light of human resources and funding challenges.

Regarding groundwater modeling, Ms. Leckband commented that it is a problem if stakeholders and regulators cannot understand the models produced by DOE.

Mr. Gilbertson replied that in order to address this, EM needs a knowledge management approach and must provide quality models that regulators can run and regular people can understand. However, EM must also use more sophisticated models in order to validate the simple ones. The program will need to take advantage of super computing tools to reduce risks and technical uncertainties and tackle this issue moving into the future.

There are also common modeling issues that regulators tackle across the complex. They include the topics of (1) what models are appropriate for various circumstances and (2) the need to bring rigor to the concept of technical impracticability. EM needs to work with the states and EPA to update technical impracticability guidance so that it is commensurate with current scientific advances. A working group will be convened to address this.

It is an exciting time for the program, and EM needs to continue to work with the EM SSAB and dialogue on its issues and priorities. EM will continue to perform lessons learned and host additional workshops. Furthermore, EM-20 remains committed to supporting Federal Project Directors and providing the technical resources necessary to confront EM's challenges. Mr. Gilbertson's office will also continue to refine the Engineering and Technology Roadmap.

Ms. Patterson commented that the SRS CAB is interested in EM's Plutonium Workshop. As the EM SSAB sites begin to head in different directions, she suggested that those with common issues consider holding separate, more focused, dialogues.

Ms. Shelley Cimon raised the issue of Hanford's document destruction moratorium being lifted. The HAB is very concerned that its site is losing information necessary for waste characterization and remediation.

Mr. Gilbertson cautioned that the process-data that Ms. Cimon referred to could be double-edged. In some ways it is good to have, but it has also contributed to EM's underestimation of [tank] waste volume. From a credibility perspective, the program needs to be aware of this.

Mr. Flanery asked about what EM was doing to resurrect previous communications efforts. What lessons were learned and what is it doing differently?

Mr. Gilbertson explained that many of the people involved in the previous efforts are still with the program; the institutional memory remains. In order to move forward, EM will build on past efforts and use next-generation tools.

Ms. Patterson asked if communications was a component of Mr. Gilbertson's official responsibilities or if it was a personal interest.

Mr. Gilbertson clarified that Mr. Rispoli identified four areas where senior managers could help EM improve itself as an organization. The areas include: business processes; diversity; roles, responsibilities, accountabilities, and authorities; and communications. To date, the EM Communications Working Group has paid quick dividends, such as the creation of a master EM calendar, the sophistication of an EM brand, and a more inclusive budget development process. The working group has also partnered with the EM Advisory Board to address the institutionalization of communication and received recommendations from NAPA and the November Intergovernmental Groups meeting.

To conclude the discussion, Ms. Leckband reintroduced the HAB's remedial action flow chart and made copies available for distribution.

EM SSAB Product Development Discussion

Ms. Cimon drafted two letters for the Chairs' consideration. The first letter thanked DOE for the opportunity to participate in the pre-decisional review of the EM-20 Program Plan and the Engineering and Technology Roadmap, and commended EM for opening this dialogue. The second letter contained a recommendation that DOE obtain a full evaluation of pre-1970 suspect and remote-handled TRU (RH TRU) waste.

The Chairs' agreed to endorse the thank you letter to EM and specifically DAS Gilbertson. Due to site-specific circumstances, the Chairs will need to further explore the subject matter of Ms. Cimon's second letter prior to considering its approval. Ms. Sanda suggested that this topic be included in the next Chairs' meeting agenda.

Upcoming Chairs Meeting Discussion

The next EM SSAB Chairs' meeting is scheduled for September 2007, and will take place in Paducah, Kentucky.

Volunteers for the September meeting's steering committee include: Alan Burnett, Shelley Cimon, Norman Mulvenon, J.D. Campbell, Melissa Nielson, Doug Frost and Kelly Snyder.

Public Comment

No comment.

Friday, March 30, 2007

Ms. Sanda provided the second day's opening remarks and reviewed the meeting agenda. She also presented a short inspirational video which reflected the EM SSAB's aspiration of providing its citizens with a voice.

Environmental Management Advisory Board (EMAB) Briefing – Dr. Dennis Ferrigno, EMAB Vice Chair

Dr. Ferrigno thanked the Chairs for the opportunity to speak at their semi-annual meeting and noted that he was very impressed by the quality and diversity of the EM SSAB's representation.

EMAB began in 1992 as the larger EM Advisory Committee before being re-chartered as an advisory board in 1994. Like the EM SSAB, EMAB provides advice and recommendations to the Assistant Secretary. However, while the EM SSAB focuses on site specific issues, EMAB examines corporate management, overall policy, and program-wide concerns. At the request of the Assistant Secretary, EMAB provides observations, recommendations, reports, and convenes subcommittees on a variety of EM issues.

EMAB members are nominated by EM-1 and appointed by the Secretary of Energy for terms of one or two years. Currently, nine individuals serve on EMAB and hail from a variety of backgrounds including private industry, law, academia, regulatory agencies, and stakeholder communities. EMAB comprises both Special Government Employees and representatives; its DFO is Ms. Terri Lamb who is located in the Office of Public and Intergovernmental Accountability at DOE HQ.

EMAB holds semi-annual public meetings and, with Mr. Rispoli's encouragement, has begun taking its meetings to the major EM sites. This provides the members with the opportunity to participate in site tours and interact with the local EM SSAB. EMAB's next public meeting is tentatively scheduled for September 2007 in New Mexico.

In 2006 EMAB developed and submitted 11 recommendations on the topics of acquisition, project management, human capital, and communications under the cover of the "Environmental Management Advisory Board's FY 2006 Report to the Assistant Secretary." Dr. Ferrigno provided the meeting participants with a list of the actual recommendations which can also be found on EMAB's website, <http://www.em.doe.gov/emab>. One recommendation that was particularly relevant to the EM SSAB Chairs addressed the need for timely and adequate information and responses to local governments, stakeholders, and the EM SSAB on behalf of DOE.

EMAB's 2007 focus includes the topics of small business, acquisition, and project management; employee recruitment and retention; communications; technical uncertainty

and risk reduction; and discretionary budgeting. Dr. Ferrigno also expressed EMAB's desire to maintain an open dialogue with the EM SSAB and encouraged the CABs to attend and participate in its public meetings.

In response to questions from Ms. Cimon and Ms. Leckband, Dr. Ferrigno clarified that a number of EMAB members had backgrounds in the nuclear and renewable energy industries.

Mr. Campbell noted that EMAB's committees and/or working groups may be interested in the EM SSAB recommendations.

Ms. Nielson indicated that Ms. Lamb, the EMAB DFO, had access to all of the EM SSAB recommendations and could make them available to EMAB.

Update/Discussion: Remote-Handled TRU Waste – Dr. David Moody, Carlsbad Field Office Manager

Dr. Moody provided a background description of the Waste Isolation Pilot Plant (WIPP). The plant has received waste from across the EM complex for the past nine years and is regulated by the EPA, the New Mexico Environment Department, and the Nuclear Regulatory Commission (NRC). Safety is number one; for 20 consecutive years, WIPP has been the New Mexico Mine Operator of the Year and in November 2006 it achieved four million safe-hours.

In addition to accepting waste shipments, WIPP partners with major universities and national laboratories to engage in high-energy physics experiments.

Mr. Burnett pointed out that it is not typical for a DOE operation to be regulated by the NRC and asked how that regulation has fared.

Dr. Moody explained that WIPP has a good working relationship with the NRC. WIPP has more licensed packages than almost any entity and has successfully updated its certificate of compliance multiple times.

WIPP has received 5500 shipments to date and removed all of the TRU waste from 13 sites. Shipments are tracked by satellite and drivers are in constant communication with WIPP's central monitoring. WIPP interfaces with many states and tribes regarding waste shipments, and provides them access to its tracking system.

WIPP's storage capacity comprises ten underground panels. Each panel will be maintained for the life of the facility, and opportunities to expand beyond the original ten are possible. DOE is currently emplacing waste in Panel Four and has begun mining Panel Five; WIPP is filling each panel at a rate of 18-24 months.

Dr. Moody described a number of shipping containers used to bring waste to WIPP and for inter-site transportation. Currently, Type B shipping containers licensed by the NRC

include the TRUPACT II and the lead-shielded Half Pack and RH TRU containers. DOE has developed a TRUPACT III but needs to have it licensed before it can be deployed. In 2006, WIPP received over 1,100 shipments, or 10,000 meters³, of waste.

The EPA approved WIPP's procedures for characterizing RH TRU waste in 2004, and following negotiations with stakeholders, the New Mexico Environment Department issued a permit. Having undergone extensive authorization and readiness reviews, Idaho National Laboratory became the first and only site, to date, to ship RH TRU to WIPP. The waste is stored in the walls of the plant's underground panels and transported in RH 72 B casks known as "dumbbells" or "dog bones." Dr. Moody also explained the logistics of removing RH TRU waste from its shipping containers and installing the canisters in the underground repository.

In response to a question from Mr. Campbell, Dr. Moody stated that the external radiation levels of the shipping casks do not exceed 50 mrem/hr. WIPP has a regulatory limit of 1000 mrem/hr and was essentially over-designed with enough shielding to accommodate even HLW or spent nuclear fuel.

Dr. Moody commented that WIPP will begin to increase the amount of RH TRU shipments it receives from Idaho National Laboratory in April and will then work to remove canisters from LANL. He added that Argonne National Laboratory has been certified by the EPA and the New Mexico Environment Department to begin RH TRU shipments, a final audit is scheduled for this summer. WIPP will also begin to receive 10-160 B shipments from Savannah River's Battelle Columbus in September 2007.

In response to questions from Mr. Campbell, Ms. Frances Berting, and Mr. Mulvenon, Dr. Moody clarified that RH TRU canisters are emplaced in boreholes that have been drilled into the walls of the underground panels while contact-handled TRU waste canisters are stored on the panels' floor. Salt flows around the canisters to seal the boreholes completely at the rate of a couple of inches per year. RH TRU is emplaced one room ahead of the contact-handled TRU; however, if WIPP does not receive RH TRU fast enough, the contact-handled TRU fills up the panels' floor space and blocks access to the wall storage. WIPP is exploring a number of alternatives to avoid this space inefficiency.

Ms. Leckband expressed concern that WIPP's RH TRU capacity will be filled before Hanford is ready to ship its canisters; however, she was glad to hear that there were possibilities to expand the repository.

Dr. Moody explained that the current known inventory of RH TRU is 5,300 meters³. WIPP has a legislative limit of 7,080 meters³ and a projected volume of 7400 meters³. He cautioned that historically, waste that has been disposed as RH TRU does not necessarily arrive as such; he believes that the plant will have sufficient legislative capacity. However, due to its success with contact-handled TRU, WIPP is losing RH TRU capacity and will need to work with stakeholders and regulators to maximize its storage.

Lastly, to clarify, Dr. Moody indicated that waste is classified as RH TRU if it has a surface dose greater than 200 mrem/hr per hour.

Public Comment

No Comment.

EM SSAB Product Wrap-Up

Meeting participants reviewed the aforementioned thank you letter to DOE and DAS Gilbertson and agreed to take it back to their respective boards for consideration. The NTS CAB will coordinate the approval and processing of the letter.

DOE-HQ “News and Views” – Melissa Nielson and Doug Frost

Ms. Nielson provided an update from Ms. Christine Gelles, Acting Director for Disposal Operations. She explained that the mixed low-level waste (MLLW) disposition life-cycle cost analysis guidance is under development and will tier off of DOE waste disposition order 435.1. This document will also address the Government Accountability Office’s recommendations. A rough draft is in process and the internal review is expected to be lengthy. DOE has not determined a date for issuance.

The National Waste Disposition Strategy will be released shortly. Comments provided by the EM SSAB have not been included in this iteration; however, they will be incorporated into later versions. An annual update is planned for the summer and will include revised waste volume data.

The Waste Information Management System’s data will be updated on April 30, 2007. In response to the EM SSAB’s concern that DOE capture a wider picture, the updated LLW and MLLW planning data will include information from EM, the Office of Nuclear Energy, the Office of Science, and NNSA sites.

The next EM SSAB Chairs’ bimonthly conference call is scheduled for May 10, 2007 at 3:00 p.m. EST.

The next EM SSAB Steering Committee call is scheduled for May 3, 2007 at 3:00 p.m. EST.

The next EM SSAB Chairs’ meeting will take place in September 2007 in Paducah, Kentucky. The spring 2008 meeting will take place in Richland, Washington, and the EM SSAB Chairs and staff will consider holding the fall 2008 meeting in Washington, D.C. at the suggestion of the Hanford Board.

Mr. Frost thanked the NTS CAB for hosting the semi-annual meeting, and the EM SSAB Federal Coordinators and administrative staff for all of their work. He also recognized

ORSSAB Vice Chair Norman Mulvenon for his service and dedication. Mr. Mulvenon is completing his final term on the ORSSAB.

Mr. Frost adjourned the meeting.